

1050-42

Reperfusion Therapy With Either Intravenous Thrombolysis or Primary PTCA in Elderly Patients Is Beneficial: One-Year Results From a Nationwide French Registry of Acute Myocardial Infarction

Nicolas Danchin, Laurent Vaur, Nathalie Genes, Jean Ferrieres, Michael Angioi, Sylvie Etienne, Jean-Pierre Cambou, the USIK investigators, *HEGP 20 rue Leblanc, Paris, France.*

Background: The role of early reperfusion therapy at the acute stage of MI in elderly patients is debated. **Aim and Methods:** The aim of this study was to analyze the prognostic role of reperfusion with IV thrombolysis or primary PTCA in the nationwide USIK database, which prospectively included all pts admitted to a CCU for an AMI in France in November 1995. For the purpose of the present study, only patients admitted within 24 hours of AMI and with one-year follow-up available were included. **Results:** Of the 1,838 patients included, 785 were > 70 years old, of whom 225 (29 %) had early reperfusion therapy with thrombolysis (n=173) or primary PTCA (n=52). Patients treated with early reperfusion had a baseline profile that differed from that of patients treated conventionally: women (31 % vs 50 %, $p < 0.001$), admission within 6 hours of symptom onset (84 % vs 54 %, $p < 0.001$), history of systemic hypertension (48 % vs 60 % $p < 0.002$), history of stroke (5 % vs 11 %, $p < 0.01$), peripheral arterial disease (8 % vs 18 %, $p < 0.001$); congestive heart failure (5 % vs 20 %, $p < 0.001$), previous MI (12 % vs 25 %, $p < 0.001$), anterior location of current MI (40 % vs 28 %, $p < 0.002$). Overall one-year Kaplan-Meier survival was 78 % for patients with versus 64 % for those without reperfusion therapy ($p < 0.01$). Cox multivariate analysis showed that reperfusion therapy was an independent predictor of survival (RR 0.71; 95% CI: 0.50-0.99), along with age (RR: 1.04, 95% CI: 1.02-1.07), anterior location of MI (RR: 2.14, 95 % CI: 1.64-2.80), history of stroke (RR: 1.81, 95 % CI: 1.25-2.61), and history of congestive heart failure (RR: 1.66, 95 % CI: 1.18-2.32). When the analysis was repeated after exclusion of the patients who underwent primary PTCA, treatment with IV thrombolysis was also associated with higher one-year survival, and thrombolysis was of borderline statistical significance in the Cox multivariate analysis (RR: 0.72, 95 % CI: 0.50-1.04, $p=0.08$). **Conclusions:** data from this large "real life" registry indicate that reperfusion therapy with either thrombolysis or primary PTCA is associated with improved one-year survival in patients over 70 years of age.

1050-43

Gender Is an Independent Predictor of Both In-Hospital and One-Year Outcomes Following Primary Intervention for Acute Myocardial Infarction

Kimberly A. Skelding, Kishore Harjai, Laxmi Mehta, Gregg W. Stone, David A. Cox, Judith A. Boura, Lorelei L. Grines, William W. O'Neill, Cindy L. Grines, *William Beaumont Hospital, Royal Oak, Michigan.*

Background: Prior studies have indicated that female gender contributes to worse prognosis from acute myocardial infarction (MI), elective percutaneous intervention (PCI), and coronary artery bypass grafting (CABG). However the impact of gender on outcomes following primary angioplasty for acute MI is not well established.

Methods: We evaluated the outcomes of 3401 patients from the PAMI studies receiving primary intervention for acute MI, of whom 27% were female. Clinical data, angiographic details and outcomes were evaluated.

Results: Females were older (66 ± 12 vs 59 ± 12 , $p=0.0001$), more often diabetic (22% vs 14%, $p=0.001$), and hypertensive (57% vs 42%, $p=0.001$). They more often had prior congestive heart failure (3.4% vs 1.9%, $p=0.009$), and cerebrovascular events (9% vs 4%, $p=0.001$). Females were less often current smokers (36% vs 44%, $p=0.001$), had less incidence of prior CABG (2.6% vs 4.7%, $p=0.010$), prior MI (12% vs 15%, $p=0.020$), and prior PCI (7.7% vs 10.3%, $p=0.021$). Angiographically, patients were similar: initial % stenosis (98 ± 6 vs 98 ± 5 , $p=0.180$), ejection fraction (48 ± 12 vs 49 ± 12 , $p=0.594$), final % stenosis (15 ± 17 vs 15 ± 17 , $p=0.881$) and TIMI flow pre ($p=0.108$) and post ($p=0.747$) procedure. Females had less multivessel disease (44% vs 49%, $p=0.006$). Females had higher in hospital death (4.6% vs 2.3%, $p=0.001$), death at 1 year (10% vs 6%, $p=0.001$) and target vessel revascularization (TVR) at 1 year (18% vs 13%, $p=0.005$). Adjusted for baseline differences, females remained at higher risk of in-hospital cardiovascular events including TVR, disabling stroke, reinfarction or death following primary PCI (8.7% vs 5.7%, $p=0.001$). This difference continues at 1 year (27% vs 19%, $p=0.001$). On multivariate analysis female gender is an independent predictor for in-hospital events ($p=0.0025$, OR=1.634, 95% CI=1.189-2.247) and remains predictive at 1 year ($p<0.0001$, OR=1.553, 95%CI 1.258-1.916).

Conclusions: This data suggests that female gender is a significant independent predictor of major cardiovascular events at one year following primary PCI for acute MI. Further study is needed to determine if additional clinical and/or angiographic conditions also contribute to this difference.

1050-44

Outcomes for Asian Indians Following Acute ST Elevation Myocardial Infarction: Results From the Elevation Myocardial Infarction: Results From the GUSTO Trials

Venu Menon, Lilin She, Rabia Arshad, Anne S. Hellkamp, Sunil V. Rao, Judith S. Hochman, E Magnus Ohman, *St Lukes Roosevelt, NY, New York.*

Background: Relative outcomes following thrombolytic therapy for Asian Indians (AI) compared to Caucasians (C) have not been reported. **Methods:** We compared clinical outcomes in 475 AI enrolled in GUSTO-I (1990-3) GUSTO IIb (1993-5) and GUSTO-III (1995-7) and compared them to 54799 C. **Results:** AI were significantly younger, shorter and lighter than C (all $P < 0.001$). They were more likely to be male, have a history of diabetes but were less likely to be current smokers (all $P < 0.001$). Time to treatment, presenting heart rate, rates of hypertension and hypercholesterolemia were similar (all $p = NS$). Despite lower rates of angiography (37% vs 53%, $p = 0.0001$) and diminished left ventricular function in AI (47.7 ± 14.2 vs 51.5 ± 13.2 , $p = 0.004$), distribution of 1-2-3 vessel disease were similar. Although rates of moderate/severe bleeding were comparable,

AI had less strokes (0.21 vs 1.47%, $p = 0.04$). Overall 30 day and 1 year mortality for AI (6.99 vs 8.00% and 11.04% vs 11.36%) were similar as were rates of reinfarction and shock. Thirty day (OR 1.399, 95% CI 0.878, 2.230, $p=0.16$) and 1 year mortality (OR 1.144, 95% CI 0.770, 1.699, $p = 0.51$) for AI remained similar to C after adjusting for age, gender, weight, height, systolic BP, Killip Class, heart rate, diabetes, hypertension, infarct location, smoking status, time to treatment, rates of previous MI, prior CABG, prior stroke and angina, as well as US location of enrollment. Amongst countries enrolling a large number of AI, observed 30 day mortality rates for AI in Canada ($n = 200$), USA ($n = 108$) and South Africa ($n = 79$) were 7.5%, 5.6% and 13.9% respectively. **Conclusion:** 30 day and 1 year mortality for AI are similar to C following acute ST elevation MI. Regional differences in outcome deserve further exploration.

POSTER SESSION

1051 Stable Ischemic Syndrome II: Therapy

Sunday, March 17, 2002, 3:00 p.m.-5:00 p.m.

Georgia World Congress Center, Hall G

Presentation Hour: 4:00 p.m.-5:00 p.m.

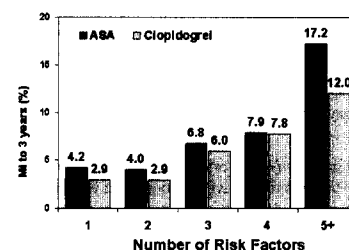
1051-27

Predicting and Preventing Myocardial Infarction With Clopidogrel in Patients With Symptomatic Atherothrombosis: Results From CAPRIE

Christopher P. Cannon, on behalf of the CAPRIE Investigators, *Brigham and Women's Hospital, Boston, Massachusetts.*

Background: Prevention of myocardial infarction (MI) is a major goal of therapy in patients (Pts) with documented atherothrombosis. Identification of Pts at higher risk of developing a subsequent MI may assist in selecting more aggressive therapy for these Pts to prevent of MI. Although prediction rules now exist for mortality, few prediction rules exist for MI. Also, factors that predict mortality (usually related to left ventricular failure) may not be the same as predictors of MI. **Methods:** In the CAPRIE trial 19,185 Pts with recent prior MI, stroke or documented peripheral arterial disease were randomized to receive clopidogrel or aspirin (ASA). We used multivariate (MV) analysis to develop a risk score for MI. **Results:** A new MI occurred in 5.04% of Pts treated with ASA vs. 4.20% for clopidogrel, a 19.2% relative reduction, $p=0.008$. MV predictors of MI were: Prior MI ($p<0.0001$), prior angina ($p<0.0001$), prior peripheral arterial disease ($p<0.0001$), highest quartile of creatinine ($p<0.0001$), diabetes ($p=0.013$), age ≥ 65 years ($p=0.015$), prior stroke ($p=0.0497$) and treatment with clopidogrel (O.R. = 0.80, adjusted $p=0.0067$). When stratifying by number of risk factors, the benefit of clopidogrel was an absolute 1.3% reduction in MI in Pts with 1-2 risk factors, and 5.2% in Pts with 5 or more risk factors. (Figure) **Conclusions:** Risk of MI can be predicted across a 4 fold range, from 4 to 17% over 3 years. Benefit of clopidogrel was seen in both low and high risk subgroups, supporting its use in a wide spectrum of patients.

MI Risk at 3 years based on # Risk Factors and Clopidogrel vs. ASA



1051-28

Ramipril Prevents Major Cardiovascular Events in High-Risk Women: Results of the HOPE Trial

Eva Lonn, Rosa Roccaforte, Qilong Yi, Jacqueline Bosch, Jeffrey Probstfield, Peter Sleight, Gilles Dagenais, Salim Yusuf, *McMaster University, Hamilton, Ontario, Canada.*

Background: It has been suggested based on subgroup analyses in heart failure (HF) and/or post myocardial infarction (MI) trials, that ACE inhibitors may be less effective in women than in men. These studies have generally included few women and were thus not adequately powered to assess the effects of ACE inhibitors in women. Furthermore, there are no data in women without HF and with preserved left ventricular ejection fraction (LVEF).

Methods: In the Heart Outcome Prevention Evaluation (HOPE) trial we enrolled a large number of women, who were at least 55 years of age and had documented vascular disease or diabetes and additional risk factor(s) without HF and with preserved LVEF. Patients were randomized to ramipril 10mg/day or placebo and mean follow up was 4.5 years. Treatment effects in women were evaluated as a preplanned subgroup analysis. **Results:** There were 2,480 women. At baseline the placebo and ramipril groups were well balanced. Mean age was 66.5 years, 1,642 (66%) women had a history of CAD, 929 (37%) had prior MI, 273 (11%) had prior stroke or TIA, 1322 (53%) had diabetes and 1496 (60%) hypertension. Treatment with ramipril resulted in a significant reduction in the primary outcome, the composite of MI, stroke and CV death and in other outcomes of interest (Table). There was no difference (lack of statistical heterogeneity) in the magni-